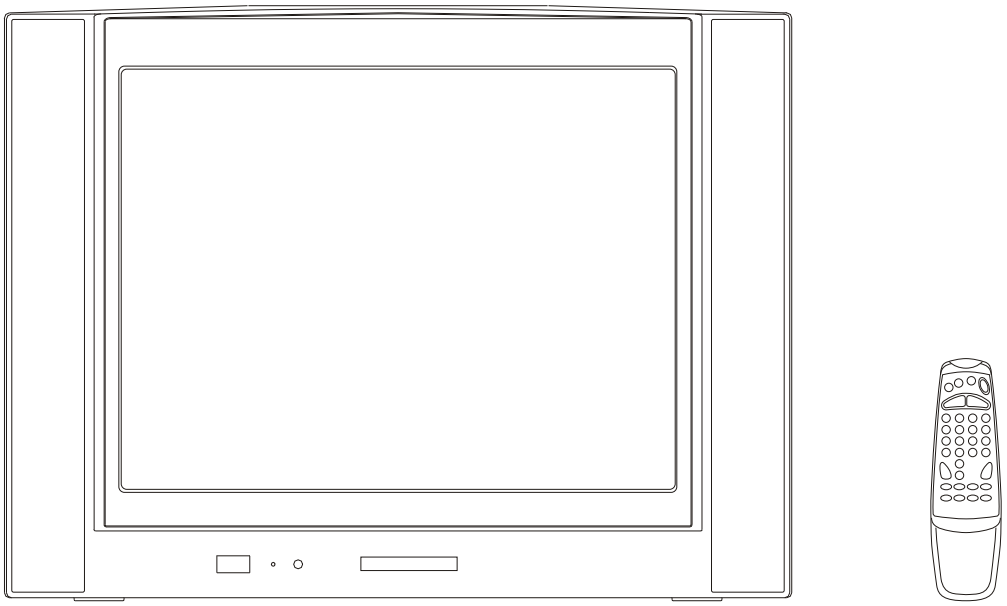
SERVICE MANUAL

5N11&5N07 CHASSIS



Design and specifications are subject to change without prior notice.
(ONLY REFERRENCE)

ENGINEER BY:_____ CHECKED BY:_____ PPROVED BY: _____

Contents

Safety Notice----------2
Technical specification----------3-4
Chassis Block Diagram----------5
IC Block Diagram ----------6-12
Transistor mark ----------13
Chassis wiring diagram ----------14
PCB Top layer ----------15-17
Service Adjustments ----------18-21
Purity and Convergence Adjustment ----------22
Control Location ----------23
Input and Output Terminals----------24
Operation Instructions----------25-27
Mechanical Disassemblies----------28
Cabinet parts List ----------29
Circuit Diagram----------30

Safety Notice

SAFETY PRECAUTIONS

1:An isolation transformer should be connected in the power line between the receiver and the AC line when a service is performed on the primary of the converter transformer of the set.

2:Comply with all caution and safety-related notes provided on the cabinet back, inside the cabinet, on the chassis or the picture tube.

3:When replacing a chassis in the cabinet, always be certain that all the protective devices are installed properly,such as,control knobs, adjustment covers or shields, barriers,isolation resistor-capacitor networks etc.. Before returning any television to the customer,the service technician must be sure that it is completely safe to operate without danger of electrical shock.

X-RADIATION PRECAUTION

The primary source of X-RADIATION in television receiver is the picture tube. The picture tube is specially constructed to limit X-RADIATION emissions. For continued X-RADIATION protection, the replacement tube must be the same type as the original including suffix letter. Excessive high voltage may produce potentially hazardous X-RADIATION. To avoid such hazards, the high voltage must be maintained within specified limit. Refer to this service manual, high voltage adjustment for specific high voltage limit. If high voltage exceeds specfied limits, take necessary corrective action. Carefully follow the instructions for +B1 volt power supply adjustment, and high voltage check to maintain the high voltage within the specified limits.

PRODUCT SAFETY NOTICE

Product safety should be considered when a component replacement is made in any area of a receiver. Components indicated by mark ⚠ in the parts list and the schematic diagram designate components in which safety can be of special significance. It is particularly recommended that only parts designated on the parts list in this manual be used for component replacement designated by mark ⚠. No deviations fromresistance wattageor voltage ratings may be made for replacement items designated by mark ⚠ .

Technical specification

FEATURES:

- AC 150V - 260V 50/60Hz;AC 90-260V 50/60Hz(option)
- MULTI SYSTEM: PAL BG/DK/I,SECAM BG/DK(OPTION),NTSC M(OPTION),NTSC3.58/4.43(PLAYBACK)
- VOLTAGE SYNTHESISED TUNING SYSTEM
- 100/256 PROGRAMS MEMORY (OPTION)
- BLUE BACK FUNCTION
- 120 MINUTES SLEEP TIMER
- FULL AUTO PROGRAM
- TIME ON ; ALARM
- CLOCK ; CHILD LOCK
- 2 AV INPUT+1 FRONT AV (OPTION)
- S-VIDEO INPUT (OPTION)
- 21 PIN SCART (OPTION)
- 1 Y U V INPUT (OPTION)
- 1 AV (MONITOR) OUTPUT SOCKET FOR VCR RECORDING (REAR, OPTION)
- 8 PAGES TELETEXT (EAST/WEST EUROPEAN, TURKISH) (OPTION)
- BLACK LEVEL STRETCH
- GERMAN STEREO/NICAM(OPTION); SURROUND SOUND, AV STEREO SOUND
- GAME (OPTION)
- PROGRAM VIEW FUNCTION
- SUPPER WOOFER (OPTION)
- FOUR PICTURE MODE：RICH ; PERSONAL; SOFT ; STANDARD
- FOUR SOUND MODE： DEFINE ; SPEECH ; MUSIC ; THEATER

GENERAL SPECIFICATION:

1、POWER CONSUMPTION： 180W（MAX.）
STANDBY POWER CONSUMPTION： ≤5.5W
2、RECEIVE SYSTEM： D/K I B/G M
3、COLOUR SYSTEM: PAL/ SECAM/ NTSC
4、VISION INTERMEDIATE FREQUENCY： 38.9MHz
5、INTER-CARRIER FREQUENCY: 4.5 MHz (M)
5.5 MHz (B/G)
6.0 MHz (I)
6.5 MHz (D/K)
5.85 MHz (NICAM B/G,D/K)
6.55 MHz (NICAM I)
5.74MHz(GERMAN STEREO)
6. CHROMA IF FREQUENCY PAL/NTSC: 34.47/35.32 MHz
7、ANTENNA TYPE: DIN TYPE 75 OHM
8、CHANNELS RECEIVING: VHF-1 A0;E2-E4;S1-S9 46.25-161.25MHz
VHF-3 S10-S41; E5-E12 168.25-463.25MHz
UHF E21-E69 CH 471.25-855.25MHz

Technical specification

9、 TUNING SYSTEM: VS TUNING

10、 AV IN/OUT: 2 AV IN+1 AV OUT; 1 FRONT AV IPUT;
1 S-VIDEO IN,1YUV IN(OPTION) ;
21PIN SCART (OPTION)

11、AV IN/OUT SPECIFICATION: Y/C IN-------Y：1.0±0.2V_{P-P} 75 OHM C:0.7 V_{P-P} 75 OHM
VIDEO IN-----1.0 ±0.2V_{P-P} 75 OHM
AUDIO IN----0-2V (r.m.s)
VIDEO OUT----1.0±0.2 V_{P-P} 75 OHM
AUDIO OUT----0-2V (r.m.s)
RGB IN：-------0.7 V_{P-P}
YUV--- Y：1.0±0.2V_{P-P} ;U ： 1.0±0.2 V_{P-P} ; V：1.0±0.2 V_{P-P}

12、OSD LANGUAGE: CHINESE/ENGLISH

13、AUDIO OUTPUT POWER: > 5W (1KHz, 0.5V INPUT , 10%THD)

14、SAFETY AUTHENTICATION STANDARD: CB/ CE (FOR 5N11); CB (FOR 5N07)

15、LED INDICATORS: POWER ON

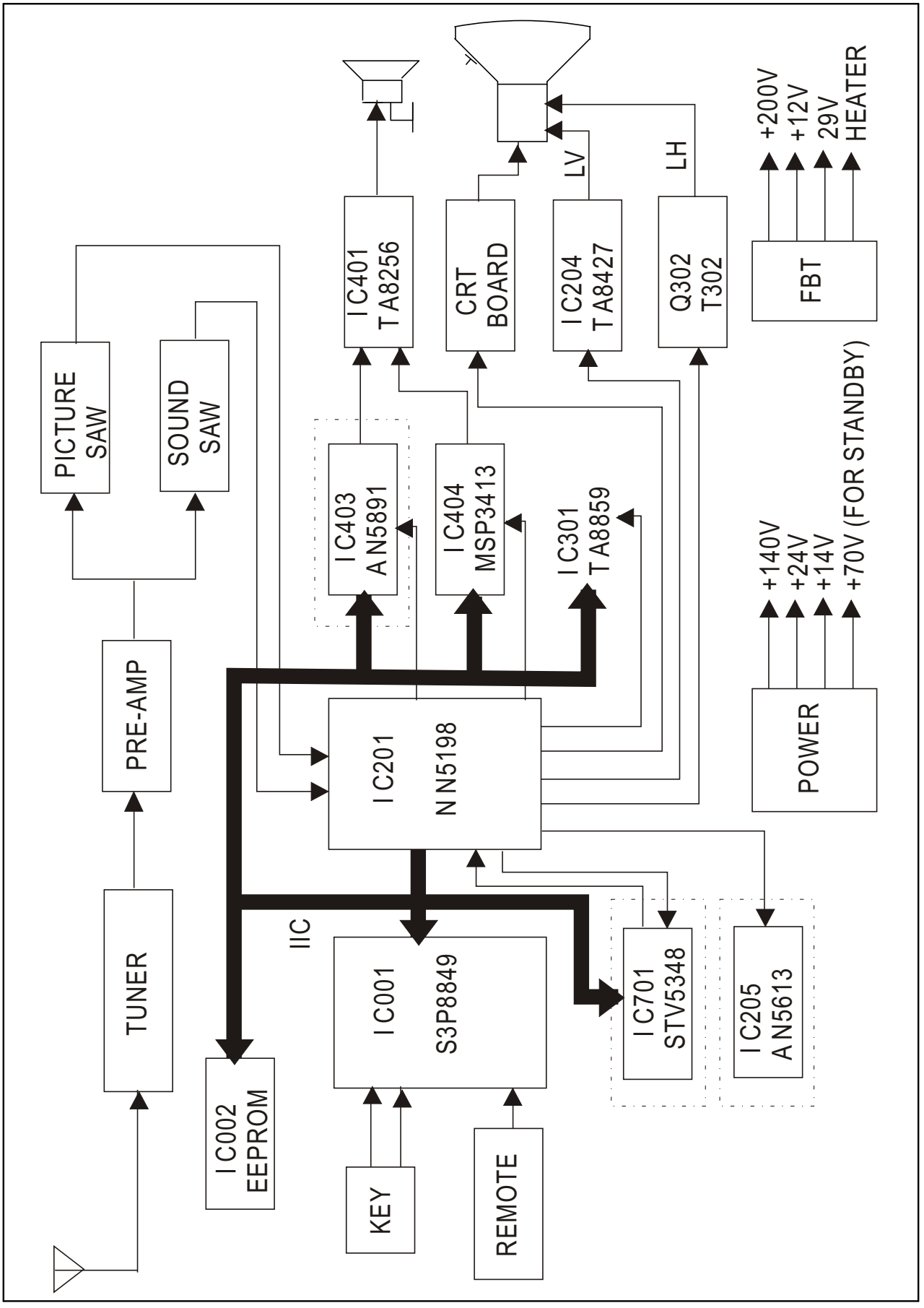
16、HAND SET TYPE : HS08 ； HS09

17、HAND SET POWER SUPLY : BATTERY 3V （UM-3/R6/AA）x2

18、COLOUR PICTURE TUBE: 25″－38″ 110 DEGREE TUBE

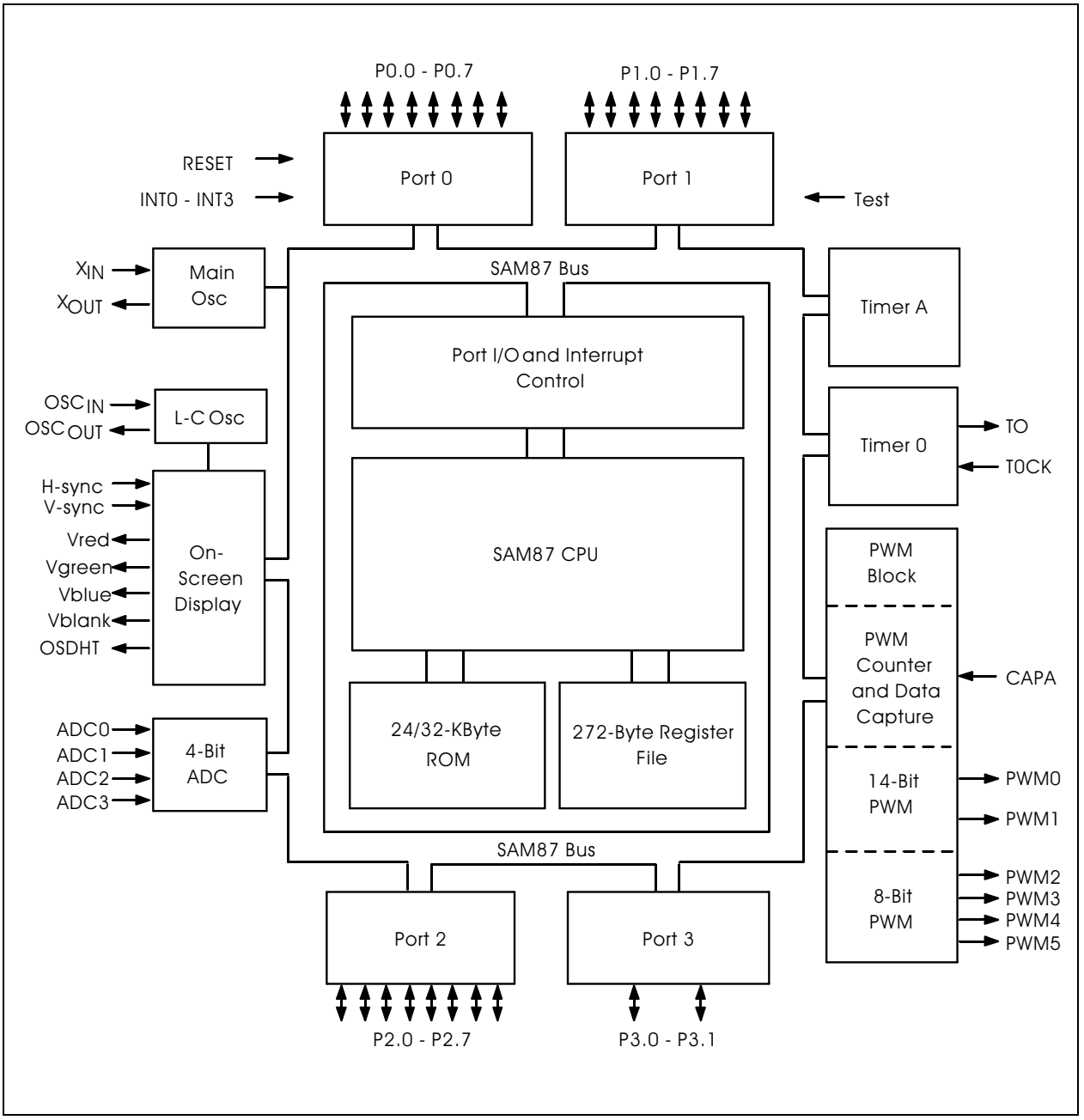
19、REMOTE CONTROL DISTANCE: ≥5 m

Chassis Block Diagram



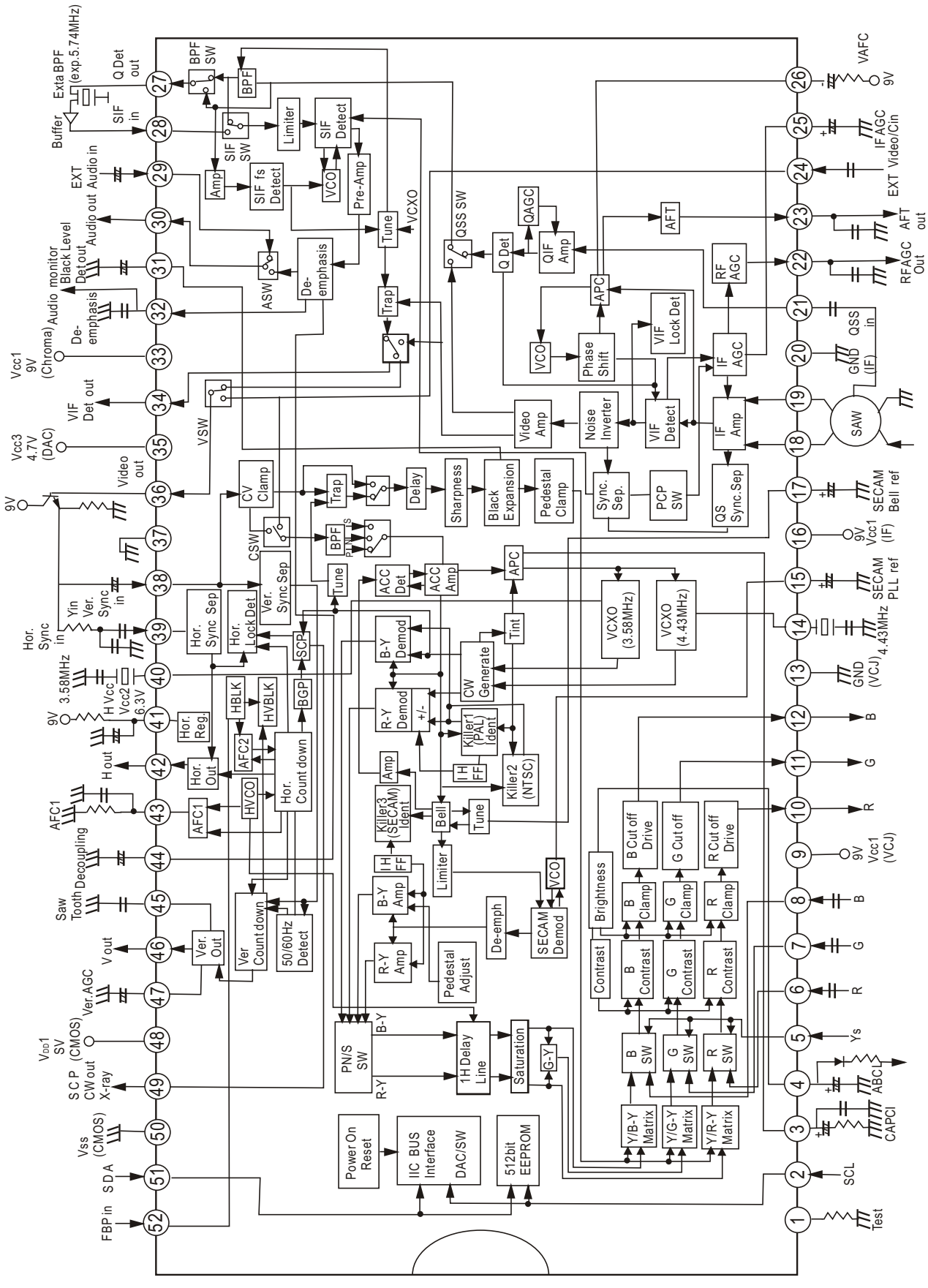
IC Block Diagram

IC 001 (MULTI SYSTEM COLOR TV CPU) S3P8849



IC Block Diagram

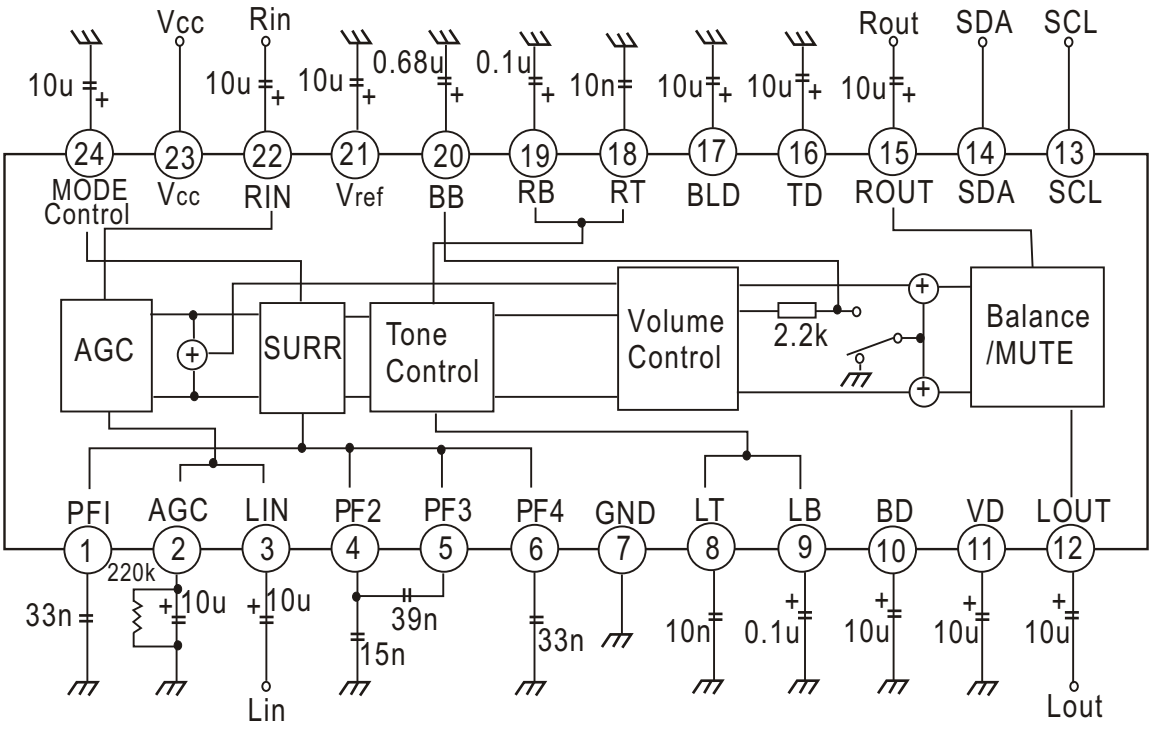
IC 201 (MULTI SYSTEM COLOR TV SIGNAL PROCESSOR) Nn5198



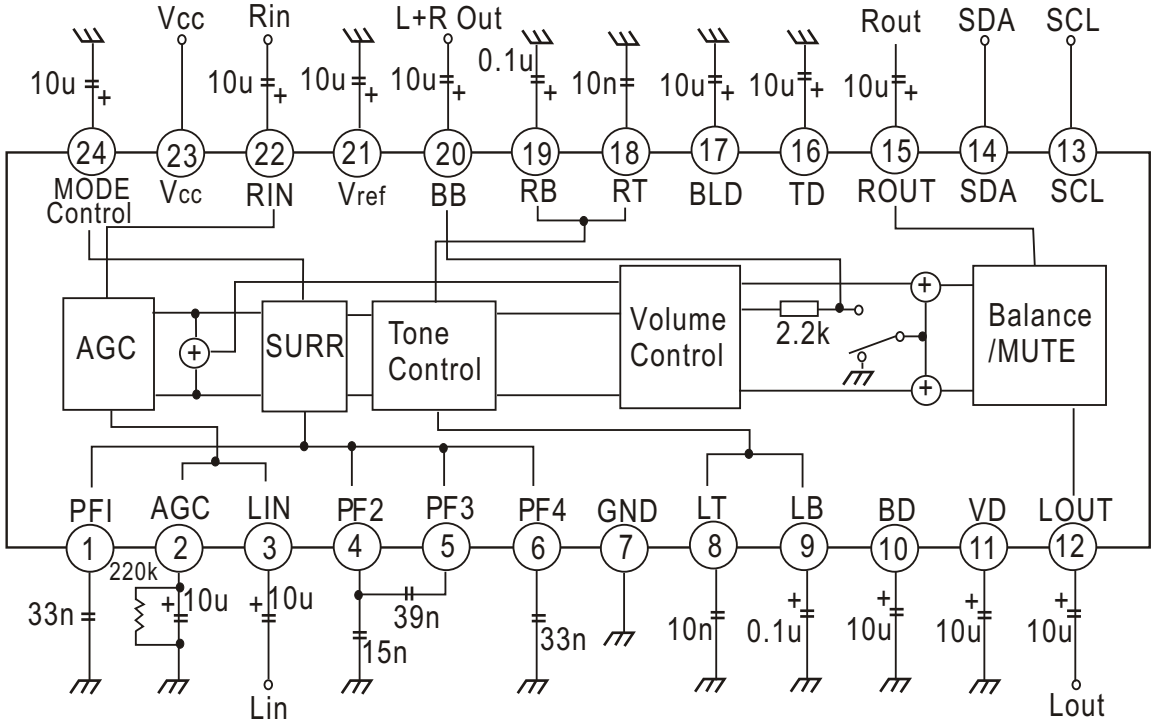
IC Block Diagram

IC403(AN5891)

[Application Circuit]

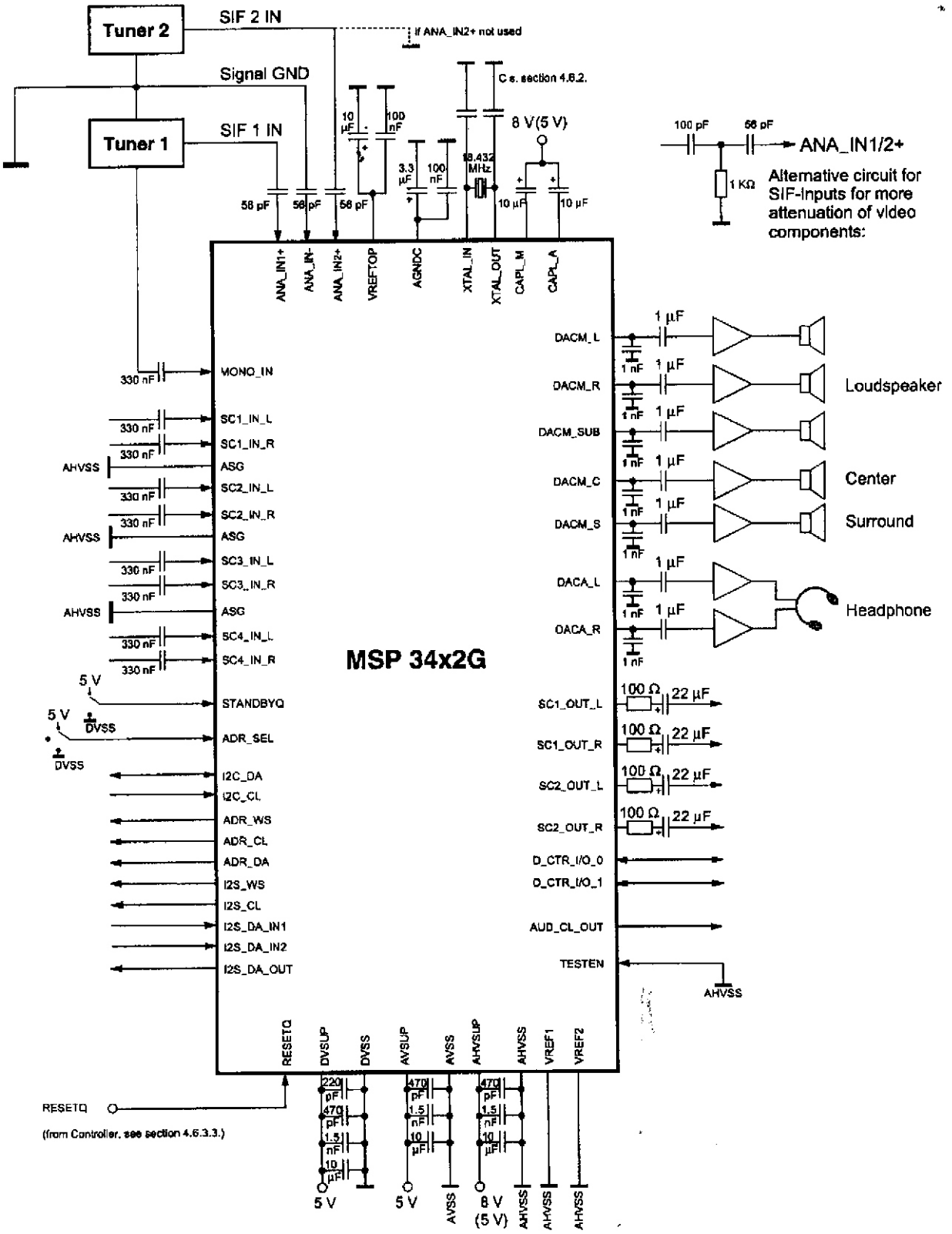


[Application Circuit to get L + R output instead of Super Bass Boos]t



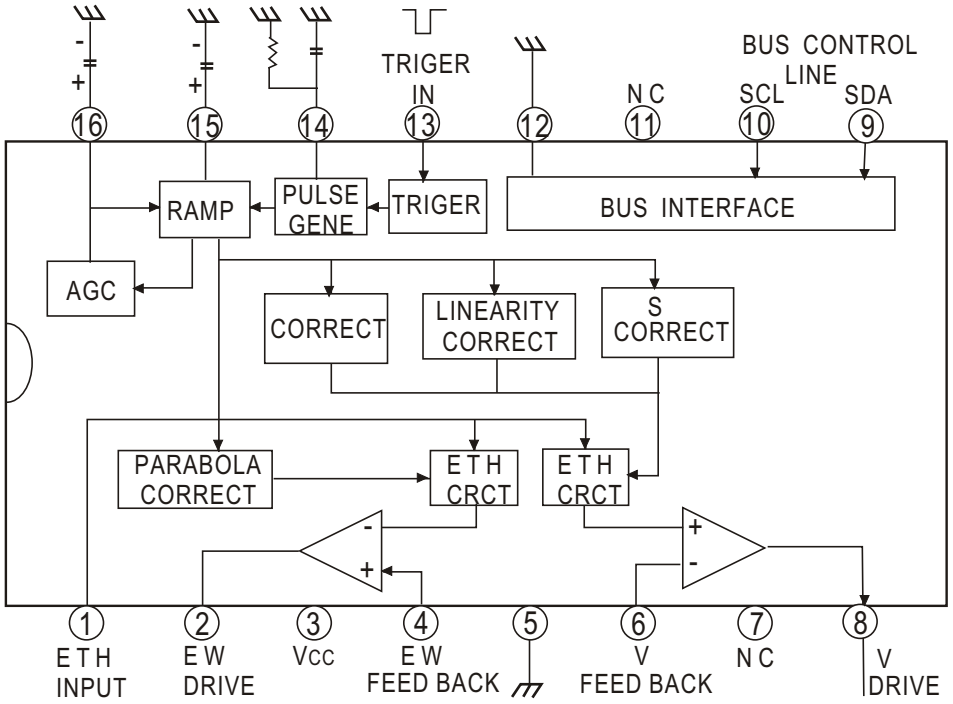
IC Block Diagram

IC404(MSP3413)

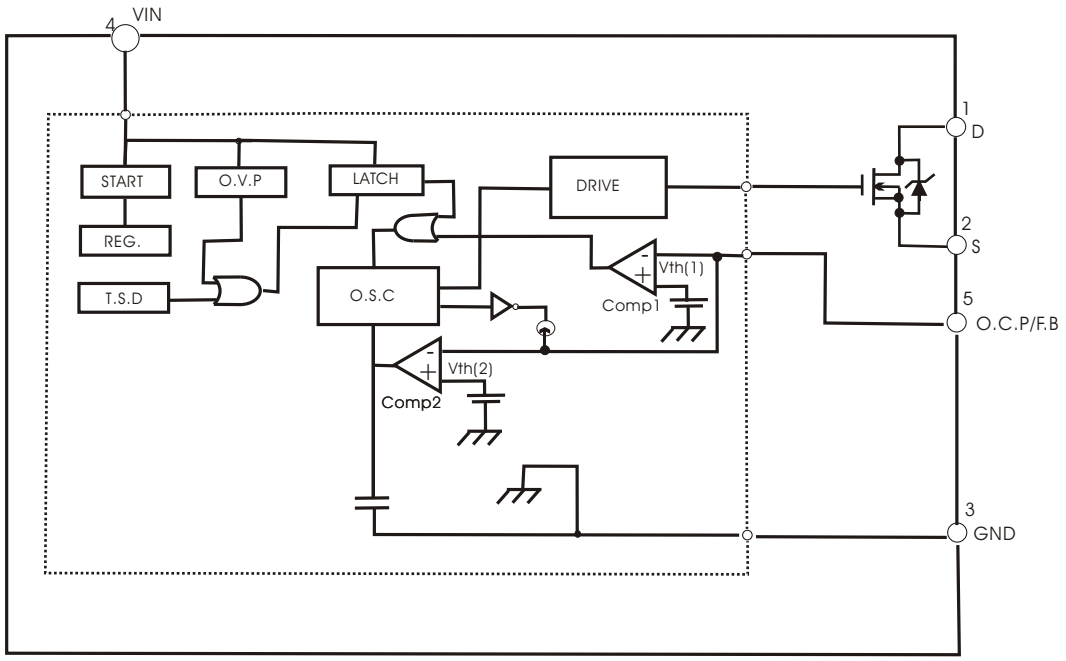


IC Block Diagram

IC301(TA8859)

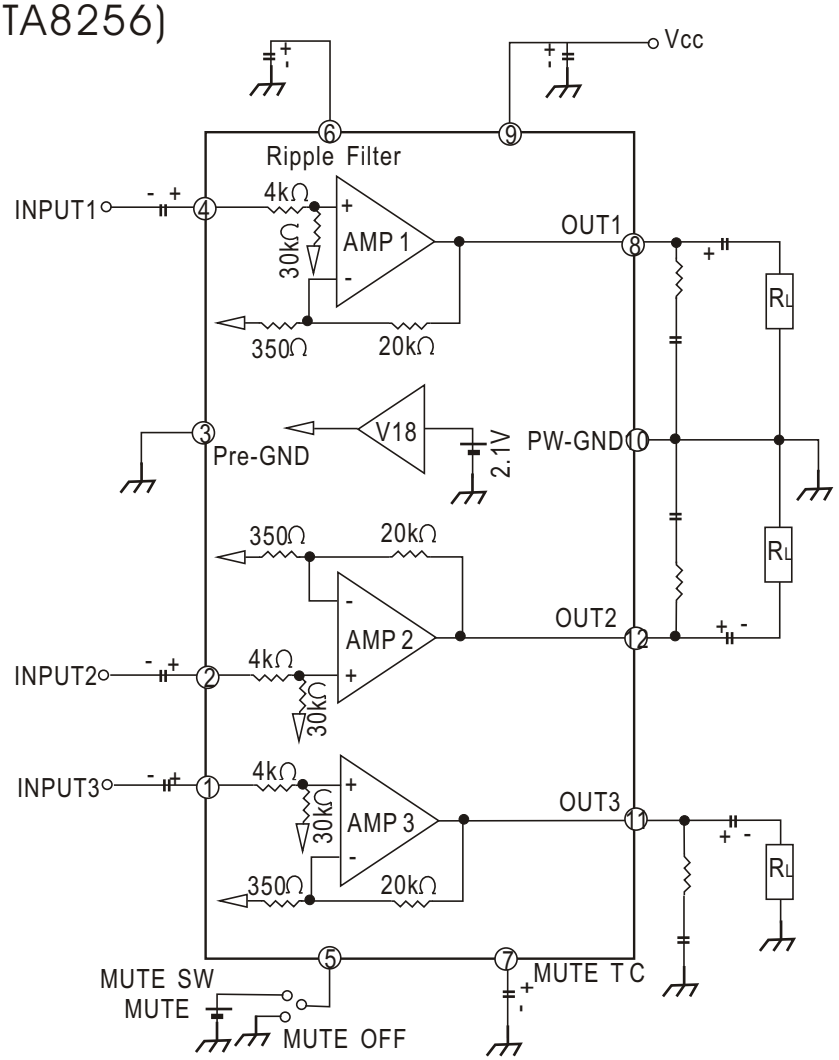


IC601 <POWER > STR-G6456

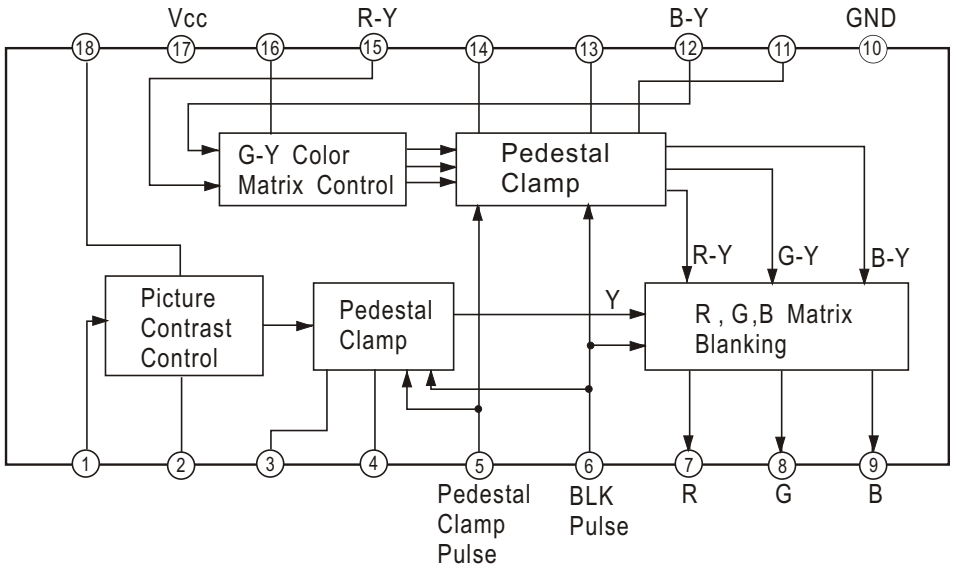


IC Block Diagram

IC401(TA8256)

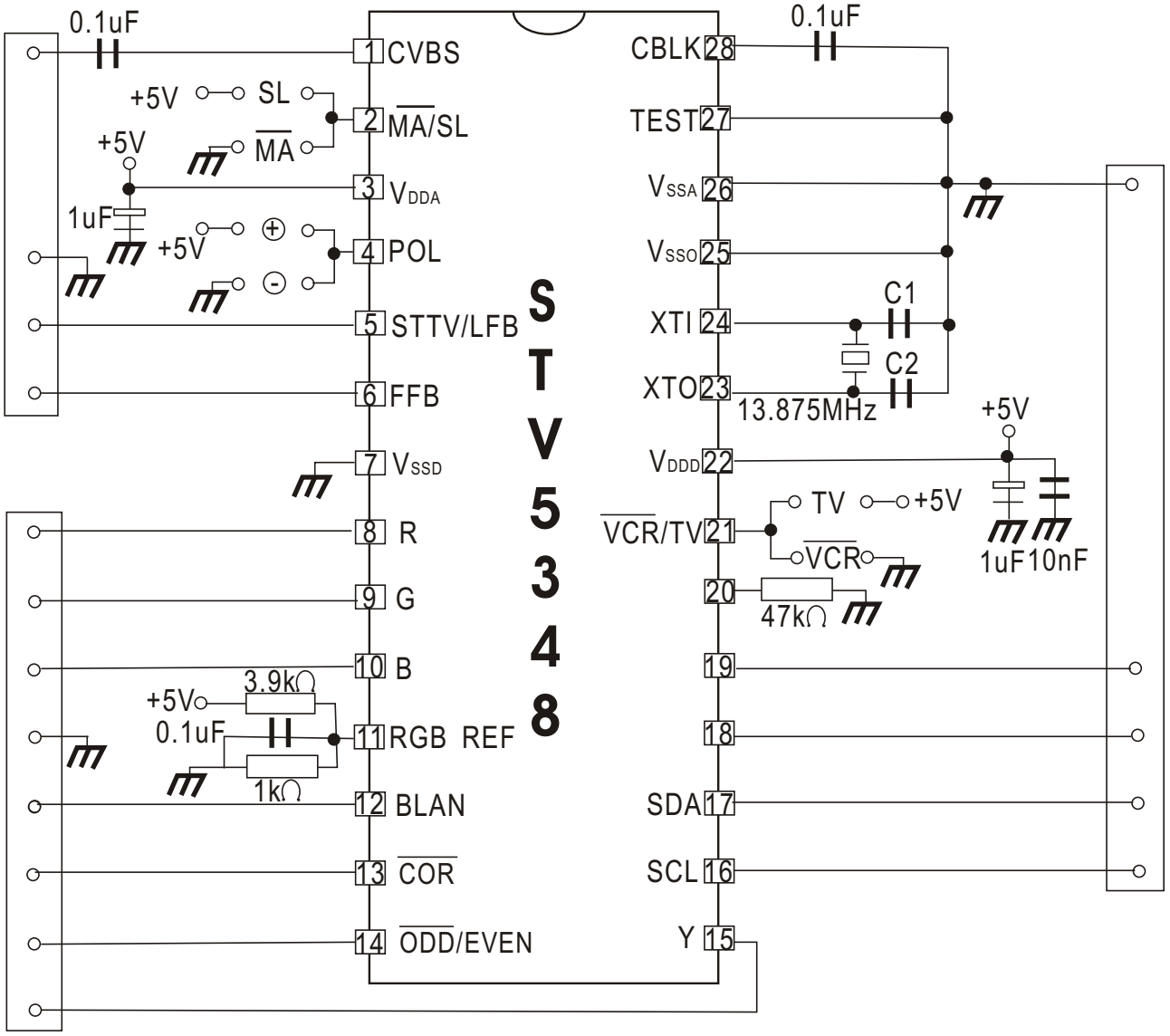


IC205(AN5613)<YUV>(Option)

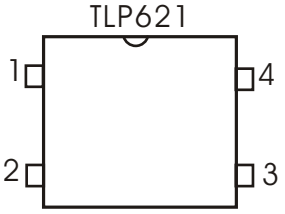


IC Block Diagram

IC701(STV5348)<TELETEXT>(Option)

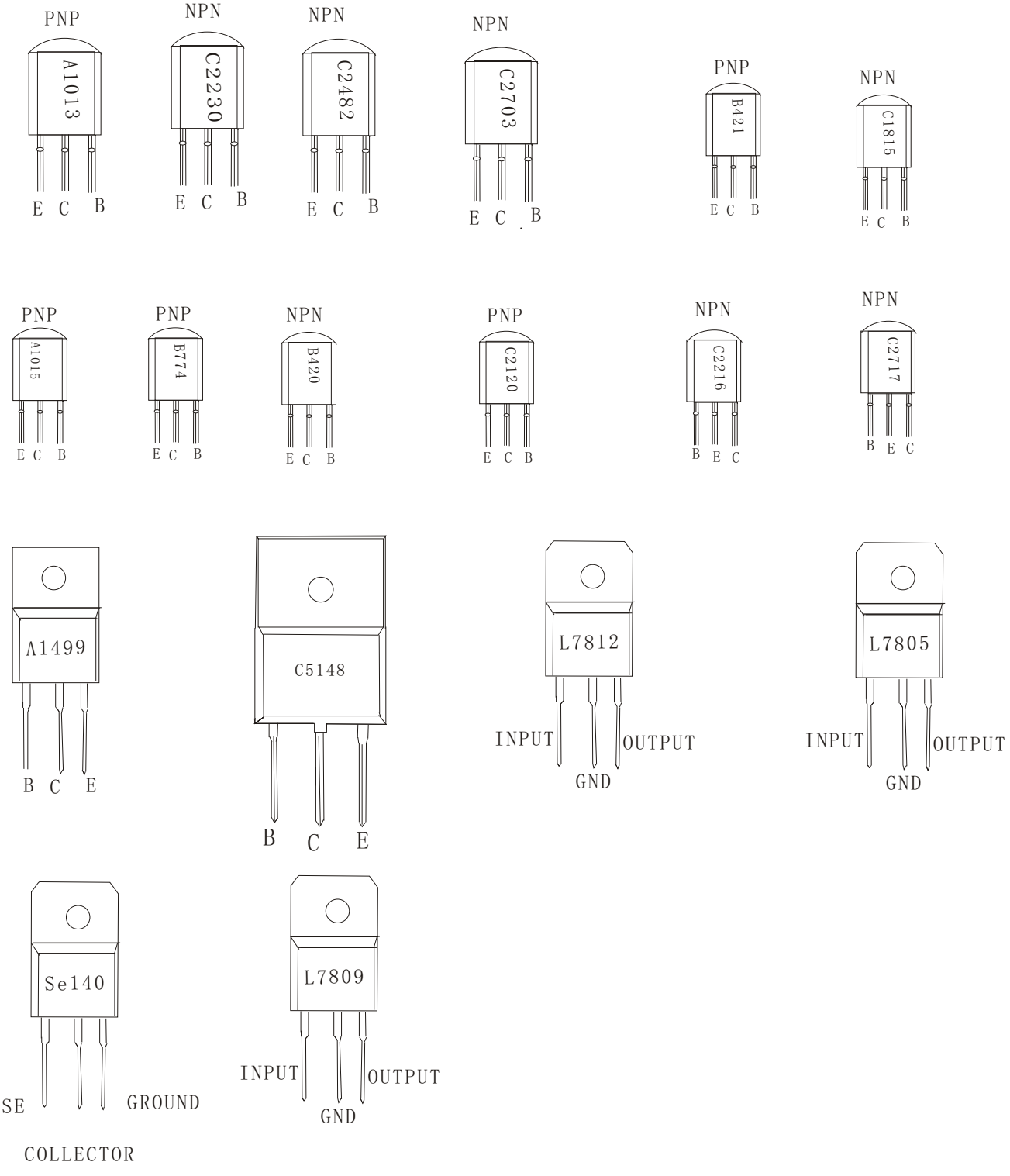


D613<PHOTO TRANSISTOR> TLP621



1:ANODE
2:CATHODE
3:EMITTER
4:COLLECTOT

Transistor Mark



Chassis wiring diagram